

## NEW ORDINAL NAMES FOR EXTANT VASCULAR PLANTS

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### ABSTRACT

Ten ordinal names proposed by me in 1992 are validated here as the cited validating descriptions were not in Latin as required by Art. 36.1 of the *International Code of Botanical Nomenclature*. Sixteen additional ordinal names discovered in the literature since 1992 are validly published: ten are members of Polypodiophyta: **Aspleniales**, **Blechnales**, **Dicksoniales**, **Hymenophyllopsidales**, **Loxsomatales**, **Mantoniales**, **Negripteridales**, **Plagiogyriales**, **Platyzomatales**, and **Stromatopteridales**. Two are referred to Pinophyta: **Cephalotaxales** and **Sciadopityales**. The remaining five are flowering plants (Magnoliophyta): **Byblidales**, **Icacinales**, **Myrothamnales**, **Rhizophorales**, and **Tecophilaeales**.

**KEY WORDS:** Polypodiophyta, Pinophyta, Magnoliophyta, orders, nomenclature

In an article published in 1992, I attempted to validate numerous ordinal names now in current use but failed to follow all of the provisions in the *International Code of Botanical Nomenclature* (Greuter *et al.* 1988). Although all of the validating descriptions (Art. 32.1[c]) cited were validly published (Art. 32.3), I did not realize that Art. 36.1 mandated that after 1 Jan 1935, a name of a new taxon (not defined in the *Code* except partially in Art. 72.1[a]) must be accompanied by a reference to a previously and effectively published Latin description or diagnosis. As many of the validating descriptions I cited were in English, German, or French, it is necessary to validate the names with a description in Latin. However, unlike the provisions relative to the valid publication of names at and below the rank of family (Art. 41), the Latin description for suprafamilial ranks can be taken from any rank as there are no provisions in the *Code* to the contrary. Accordingly, the following names are proposed again.

- Actinidiales** Takhtajan *ex* Reveal, *ord. nov.* based on the description of the type genus *Actinidia* J. Lindley by Bentham in Bentham & Hooker, *Gen. Pl.*: 1:184. 1862; Actinidiaceae J. Hutchinson, 1926.
- Cercidiphyllales** H.-H. Hu *ex* Reveal, *ord. nov.* based on the description of type genus *Cercidiphyllum* Siebold & Zuccarini by Walpers in *Ann. Bot. Syst.* 1:364. 1848; Cercidiphyllaceae Engler, 1909.
- Crossosomatales** Takhtajan *ex* Reveal, *ord. nov.* based on the description of the type genus *Crossosoma* Nuttall by Bentham in Bentham & Hooker, *Gen. Pl.* 1:15. 1862; Crossosomataceae Engler, 1897.
- Dioncophyllales** Takhtajan *ex* Reveal, *ord. nov.* based on Dioncophyllaceae (Gilg) Airy Shaw in *Kew Bull.* 6:333. 1952. - T.: *Dioncophyllum* Baillon, *nom. cons.*
- Eupteleales** H.-H. Hu *ex* Reveal, *ord. nov.* based on the description of the type genus *Euptelea* Zuccarini by Hooker in Bentham & Hooker, *Gen. Pl.* 1:954. 1867; Eupteleaceae K. Wilhelm, 1910.
- Hydrostachyales** Diels *ex* Reveal, *ord. nov.* based on [Podostemaceae] subfam. ["subordo"] Hydrostachyoideae ["Hydrostachyae"] Weddell in Alph. de Candolle, *Prodr.* 17:86. 1873. - T.: *Hydrostachys* Du Petit-Thouars; Hydrostachyaceae Engler, 1898.
- Lactoridales** Takhtajan *ex* Reveal, *ord. nov.* based on the description of the type genus *Lactoris* R.A. Philippi by Bentham in Bentham & Hooker, *Gen. Pl.* 3:127. 1880; Lactoridaceae Engler, 1888.
- Salvadorales** R. Dahlgren *ex* Reveal, *ord. nov.* based on the description of the type genus *Salvadora* Linnaeus by Endlicher, *Gen. Pl.* [15:]1141. 1840; Salvadoraceae J. Lindley (1836), *nom. cons.*
- Welwitschiales** C. Skottsberg *ex* Reveal, *ord. nov.* based on the description of the type genus *Welwitschia* J.D. Hooker, *nom. cons.*, by Bentham in Bentham & Hooker, *Gen. Pl.* 3:417, 418. 1880; Welwitschiaceae Markgraf, 1926.
- Winterales** A.C. Smith *ex* Reveal, *ord. nov.* based on [Magnoliaceae] trib. Winterae Bentham in Bentham & Hooker, *Gen. Pl.* 1:17. 1862. - T.: *Wintera* J.A. Murray, *nom. illeg.* ≡ *Drimys* J.R. & G. Forster; Winteraceae R. Brown *ex* Lindley, 1830.

Continued work on ordinal names has revealed others that require validation since I accounted for several in 1992. Dr. Ruurd D. Hoogland has pointed out to me that most of the ordinal names proposed by Tieghem are not validly

published as they fall afoul of Ex. 6 in Art. 18. Although Tieghem used the termination "-ales", the names themselves were treated by Tieghem as French, and I accept Hoogland's recommendation that such names must be considered invalid.

**Aspleniales** Pichi Sermolli *ex* Reveal, *ord. nov.* based on [Filicaceae ("Filices")] D. Asplenieae ("Aspleniaceae") S.F. Gray, *Nat. Arr. Brit. Pl.* 2:11. 1821 - T.: *Asplenium* Linnaeus; Aspleniaceae Newman, 1840.

**Blechnales** Pichi Sermolli *ex* Reveal, *ord. nov.* based on [Filicaceae ("Filices")] trib. Blechneae ("Blechnaceae") C. Presl, *Epimel. Bot.* 103. 1851 [Abh. Königl. Böhm. Ges. Wiss. ser. 5, 6:463. 1851]. - T.: *Blechnum* Linnaeus; Blechnaceae (C. Presl) Copeland, 1947.

**Byblidales** Nakai *ex* Reveal, *ord. nov.* based on the original description of type genus *Byblis* R.A. Salisbury, *Parad. Lond.* 2: sub t. 95. 1808; Byblidaceae Domin, 1922.

**Cephalotaxales** Takhtajan *ex* Reveal, *ord. nov.* based on the original description of the type genus *Cephalotaxus* Siebold & Zuccarini *ex* Endlicher, *Gen. Pl. Suppl.* 2:27. 1842; Cephalotaxaceae Neger, 1907.

**Dicksoniales** Pichi Sermolli *ex* Reveal, *ord. nov.* based on [Filicaceae ("Filices")] trib. Dicksonieae ("Dicksoniaceae") C. Presl, Abh. Königl. Böhm. Ges. Wiss. ser. 4, 5: [= *Tent. Pterid.*] 133. 1836. - T.: *Dicksonia* L'Héritier.

**Hymenophyllopsidales** Pichi Sermolli *ex* Reveal, *ord. nov.* based on Hymenophyllopsidaceae Pichi Sermolli, *Webbia* 24:712. 1970. - T.: *Hymenophyllopsis* Goebel.

**Icacinales** Tieghem *ex* Reveal, *ord. nov.* based on [Olacaceae ("Olacineae")] trib. Icacineae Bentham, *Trans. Linn. Soc. London* 18:679. 1841. - T.: *Icacina* A.H.L. de Jussieu.

**Loxsomatales** Pichi Sermolli *ex* Reveal, *ord. nov.* based on Loxsomataceae C. Presl, *Gefässbündel Farrn* 31. 1847 [Abh. Königl. Böhm. Ges. Wiss. ser. 5, 5:339. 1848] ("Loxsomaceae"). - T.: *Loxsuma* R. Brown *ex* A. Cunningham, as "*Lozoma*".

**Matoniales** Pichi Sermolli *ex* Reveal, *ord. nov.* based on Matoniaceae C. Presl, *Gefässbündel Farrn* 32. 1847 [Abh. Königl. Böhm. Ges. Wiss. ser. 5, 5:340. 1848]. - T.: *Matonia* R. Brown *ex* Wallich.

- Myrothamnales** Nakai *ex* Reveal, *ord. nov.* based on the description of the type genus *Myrothamnus* Welwitsch by Hooker in Bentham & Hooker, *Gen. Pl.* 1:1005. 1867; Myrothamnaceae Niedenzu, 1891.
- Negripteridales** Pichi Sermolli *ex* Reveal, *ord. nov.* based on Negripteridaceae Pichi Sermolli, *Nuovo Giorn. Bot. Ital. ser. 2*, 53:160. 1946. - T.: *Negripteris* Pichi Sermolli.
- Plagiogyriales** Pichi Sermolli *ex* Reveal, *ord. nov.* based on the original description of *Plagiogyria* Mettenius, *Abhandl. Senkenb. Ges.* 2:265. 1858; Plagiogyriaceae Bower, 1926.
- Platyzomatales** Pichi Sermolli *ex* Reveal, *ord. nov.* based on Platyzomataceae Nakai, *Bull. Natl. Sci. Mus.* 29:4. 1950. - T.: *Platyzoma* R. Brown.
- Rhizophorales** Tieghem *ex* Reveal, *ord. nov.* based on Rhizophoraceae R. Brown in Flinders, *Voy. Terra Austral.* 2:549. 1814 ("Rhizophoreae"). - T.: *Rhizophora* Linnaeus.
- Sciadopityales** Takhtajan *ex* Reveal, *ord. nov.* based on the original description of the type genus *Sciadopitys* Siebold & Zuccarini, *Fl. Jap.* 2:1. 1842; Sciadopityaceae Luerssen, 1877.
- Stromatopteridales** Pichi Sermolli *ex* Reveal, *ord. nov.* based on [Gleicheniaceae] subfam. Stromatopteridoideae Nakai, *Bull. Natl. Sci. Mus.* 29:32. 1950. - T.: *Stromatopteris* Mettenius; Stromatopteridaceae (Nakai) Bierhorst, 1968.
- Tecophilaeales** Traub *ex* Reveal, *ord. nov.* based on Tecophilaeaceae F. Leybold, *Bonplandia* 10:370. 1862, *nom. cons.* - T.: *Tecophilaea* Bertero *ex* L.A. Colla.

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